

# **Product datasheet for TA500922**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## PSMC3 Mouse Monoclonal Antibody [Clone ID: OTI9F3]

## **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI9F3

**Applications:** FC, IF, IHC, WB

**Recommended Dilution:** WB 1:2000, IHC 1:50, IF 1:100, Flow 1:100

Reactivity: Human, Dog, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PSMC3(NP\_002795) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.58 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 49.2 kDa

**Gene Name:** proteasome 26S subunit, ATPase 3

Database Link: NP 002795

Entrez Gene 19182 MouseEntrez Gene 29677 RatEntrez Gene 475980 DogEntrez Gene 5702

<u>Human</u> P17980





#### Background:

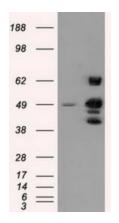
The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes one of the ATPase subunits, a member of the triple-A family of ATPases that have chaperone-like activity. This subunit may compete with PSMC2 for binding to the HIV tat protein to regulate the interaction between the viral protein and the transcription complex. A pseudogene has been identified on chromosome 9.

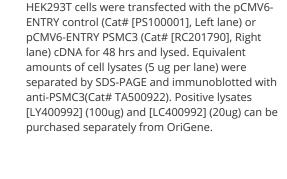
**Synonyms:** DCIDP; RPT5; TBP1

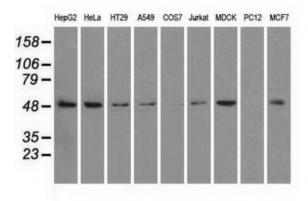
**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Proteasome

# **Product images:**

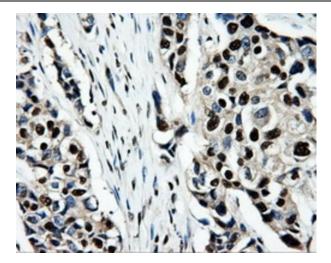




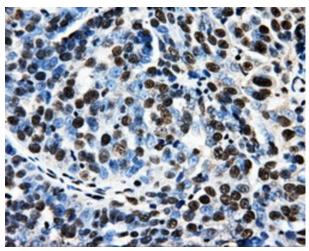


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PSMC3 monoclonal antibody.

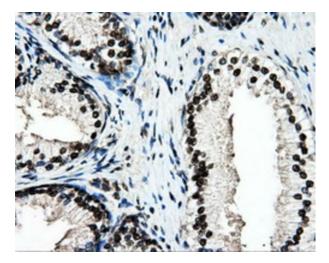




Immunohistochemical staining of paraffinembedded Adenocarcinoma of breast tissue using anti-PSMC3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

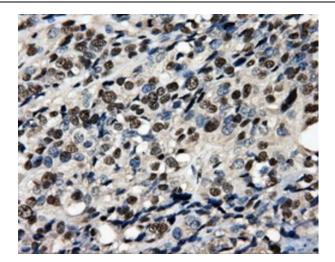


Immunohistochemical staining of paraffinembedded Adenocarcinoma of ovary tissue using anti-PSMC3mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

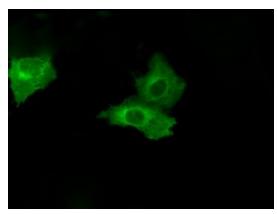


Immunohistochemical staining of paraffinembedded prostate tissue within the normal limits using anti-PSMC3mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

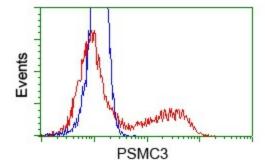




Immunohistochemical staining of paraffinembedded Carcinoma of bladder tissue using anti-PSMC3mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

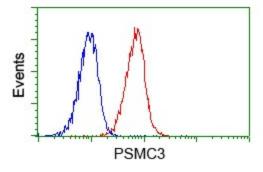


Anti-PSMC3 mouse monoclonal antibody (TA500922) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PSMC3 ([RC201790]).



HEK293T cells transfected with either pCMV6-ENTRY PSMC3 ([RC201790]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-PSMC3 mouse monoclonal (TA500922), and then analyzed by flow cytometry.





Flow cytometric analysis of Jurkat cells, using anti-PSMC3 antibody (TA500922), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).